Attorney's Docket No.: 09712-132001 / Z-293



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Peter de Groot et al. Art Unit : 2

Serial No.: 10/053,106 Examiner: Hwa S. Lee

Filed: November 2, 2001

Title : HEIGHT SCANNING INTERFEROMETRY METHOD AND APPARATUS

**INCLUDING PHASE GAP ANALYSIS** 

MAIL STOP RCE Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## INFORMATION DISCLOSURE STATEMENT

Applicants submits the reference listed on the attached form PTO-1449. Applicants also submit the following disclosure regarding prior art, reference to which is also made on the attached form PTO-1449.

Applicants disclose that prior to inventing the invention claimed in the present application, the assignee, Zygo Corporation, sold prior art height-scanning interferometers that calculated coherence and phase profiles, and calculated an experimental phase gap map based on the difference between the coherence and phase profiles. Rather than filter the experimental phase gap map as disclosed in the present application, the prior art height-scanning interferometers created a histogram for the different values of the experimental phase gap in the experimental phase gap map. The histogram showed which particular value was most common in the experimental phase gap map. That most common value was then selected as the theoretical phase gap and used to determine a height profile of the test surface.

## CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Applicant: Peter de Groot et al.

Serial No.: 10/053,106

Filed: November 2, 2001

Page : 2 of 2

This filing is being made with the filing of a Request for Continued Examination. No fee is required.

Respectfully submitted,

Attorney's Docket No.: 09712-132001 / Z-293

Date: 1964

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<sup>\*</sup>See attached document certifying that Marc M. Wefers has limited recognition to practice before the U.S. Patent and Trademark Office under 37 C.F.R. § 10.9(b).

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Substitute Form PTO-1449  U.S. Department of Comm Patent and Trademark O		Application No. 10/053,106		
Information Disclosur Statement JAN 1 2 2004 15 by Applicant	Applicant Peter de Groot et al.	1 ''		
(Use several sheets if necessary) (37 CFR §1.98(b))	Filing Date November 2, 2001	Group Art Unit 2877		

	U.S. Patent Documents						
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	6,185,315	02/06/2001	Schmucker et al.	382	108	
	AB						
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Foreign Patent Documents or Published Foreign Patent Applications							
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	Other Documents (include Author, Title, Date, and Place of Publication)				
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Initial	ID	Document			
	AQ	Prior art described in attached Information Disclosure Statement			
	AR				
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	AT				

Examiner Signature	Date Considered					
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.						